

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method of monitoring traffic in a network comprising the steps of:

receiving at least one data packet at a network interface, said network interface further comprising:

a) a run-time system first module handling communications between interacting with the network and a host, and

b) at least one or more programmable processing modules in communication with said first module through an application programming interface; and

processing information in the at least one data packet at using the at least one a programmable processing block module, thereby to generate output using the application programming interface which can be relayed from the network interface to the host network information.

2. (Currently amended) The invention method of claim 1 wherein the network interface comprises a plurality of processing modules blocks and wherein a plurality of outputs network information are is generated by the processing modules blocks which can be relayed from the network interface to the host.

3. (Currently amended) The invention method of claim 2 1 wherein the at least one programmable processing blocks module are is generated from a processing query expressed in a high-level language.

4. (Currently amended) The ~~invention~~ method of claim 3 wherein the processing query accesses functions defined in the first module ~~run-time system~~.
5. (Currently amended) The ~~invention~~ method of claim 2 1 wherein the ~~outputs~~ network information ~~is~~ are condensed statistics of network performance.
6. (Currently amended) The ~~invention~~ method of claim 1 wherein the at least one programmable processing module ~~block~~ performs filtering on the information in the at least one data packet.
7. (Currently amended) The ~~invention~~ method of claim 1 wherein the at least one programmable processing module ~~block~~ performs a transformation on the information in the at least one data packet.
8. (Currently amended) The ~~invention~~ method of claim 1 wherein the at least one programmable processing module ~~block~~ performs aggregation on the information in the at least one data packet.
9. (Currently amended) The ~~invention~~ method of claim 1 wherein the first module ~~run-time~~ can pass parameters to the at least one processing module ~~block~~, thereby changing the processing performed by the at least one processing module ~~block~~.
10. (Currently amended) The ~~invention~~ method of claim 1 wherein the first module ~~run-time system~~ can instantiate new processing modules ~~blocks~~ dynamically.
11. (Currently amended) The ~~invention~~ method of claim 1 wherein the network is a Gigabit Ethernet network.

12. (Currently amended) The invention method of claim 11 wherein the at least one data packet is an Internet Protocol datagram.

13. (Currently amended) An apparatus for monitoring traffic in a network comprising:

~~a run-time system~~ network interface receiving at least one data packet,
said network interface comprising: ~~which can execute at a network interface~~

(a) a first module handling communications between the network and a host, ~~and receive information from data packets in a network;~~ and

(b) at least one or more programmable processing blocks interacting with the run-time system through an application program interface in communication with the first module and such that the processing blocks can processing the information in the at least one data packets to and generate network information output using the application program interface which can be relayed from the network interface to a host.

14. (Currently amended) The invention apparatus of claim 13 wherein the ~~apparatus comprises~~ a plurality of:

~~processing blocks and wherein a plurality of outputs are~~ network information is generated by the processing blocks which can be relayed from the network interface to the host.

15. (Currently amended) The invention apparatus of claim 14 wherein the at least one programmable processing module blocks ~~is~~ are generated from a processing query expressed in a high-level language.

16. (Currently amended) The invention apparatus of claim 15 wherein the processing query accesses functions defined in the first module ~~run-time system.~~

17. (Currently amended) The invention apparatus of claim 14 wherein the network information is ~~outputs are~~ condensed statistics of network performance.

18. (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the at least one processing module ~~block~~ performs filtering on the information in the at least one data packet.

19. (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the at least one programmable processing module ~~block~~ performs a transformation on the information in the at least one data packet.

20. (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the processing module ~~block~~ performs aggregation on the information in the at least one data packet.

21. (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the first module ~~run-time system~~ can pass parameters to the at least one processing module ~~block~~, thereby changing the processing performed by the at least one processing module ~~block~~.

22. (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the first module ~~run-time system~~ can instantiate new processing modules ~~blocks~~ dynamically.

23. (Currently amended) The ~~invention~~ apparatus of claim 13 wherein the network is a Gigabit Ethernet network.

24. (Currently amended) The ~~invention~~ apparatus of claim 23 wherein the data packet is an Internet Protocol datagram.